**Measures of Central Tendency**

**Mean – the average**

Example: Math grades (all worth the same amount)

91, 68, 72, 86, 60

To calculate the mean, add them up and divide by the number of data values

Mean = (91 + 68 + 72 + 86 + 60) ÷ 5 = 75.4

**Median – the middle number (put all values in increasing order first)**

* *Case 1 – an odd number of data*

5 6 10 10 11 15 15

Use the formula (n + 1) / 2 formula; where n is the number of data, to determine the LOCATION of the median.

(7 + 1) / 2 = 4th number 🡪 5 6 10 10 11 15 15

* *Case 2 – an even number of data*

32 38 46 49 50 52

Use the formula (n + 1) / 2 formula; where n is the number of data, to determine the LOCATION of the median.

(6 + 1) / 2 = 3.5th number 🡪 32 38 46 49 50 52

3.5th number

Since the median is in between two number, take the average of the two numbers on either side of the line.

(46 + 49) / 2 = 47.5

**Mode – the most frequent data value**

26 95 82 95 38 46 82 82 🡪 82 is the mode

If we would have added another 95, there would have been two modes ( 82 & 95)

If every number shows up only once, there is NO MODE

**Range – is not a measure of central tendency**

Range = Largest Number – Lowest Number (subtract!)